

**TRANSLATION OF THE
MPA (BRAUNSCHWEIG) – CERTIFICATE 19773/2011
OF 2011-11-15 REGARDING
ANALYSIS REPORT No. 3212/1206-6 -NAU- OF 1996-11-15**

Note: This translation was made by MKT GmbH & Co. KG to the best of our knowledge.

November 2011, MKT GmbH & Co. KG

VALIDITY OF ANALYSIS REPORT No. 3212/1206-6 -NAU- OF 1996-11-15 IN CONJUNCTION WITH THE SUPPLEMENTARY DOCUMENTS No. 061/01 -NAU- OF 2001-05-07 AND No. 13387/2007 -CM- OF 2007-07-23

In response to your request we certify to you, that the statements presented in the above mentioned analysis report, regarding the fire behaviour of

MKT Wedge Anchor BZ plus HCR
of sizes M8 to M20, made of high corrosion-resistant steel (material No. 1.4529),

loaded in tension in reinforced normal weight concrete (strength class \geq C20/25 and \leq C50/60) and exposed to fire conditions according to the “*Tunnel-Brandraumkurve*” (Tunnel fire area curve) in accordance with ZTV-ING part 5, 2007 edition, are valid thru 2016-11-15.

This certificate includes 3 pages and includes an abstract of the above mentioned analysis report in conjunction with the above mentioned supplementary documents.

1 General

Based on the results of our analysis, exposed to fire conditions in accordance with the “*Tunnel-Brandraumkurve*” (tunnel fire area curve) subject to the regulations of ZTV-ING part 5, 2007 edition, and with special consideration given to section 3, the maximum loads of MKT Wedge Anchor BZ plus HCR can be as shown in table 2-1 of section 2.

2 Evaluation of the test results

Table 2-1: Maximum loads, when exposed to fire in accordance with the “*Tunnel-Brandraumkurve*” (tunnel fire area curve) subject to the regulations of ZTV-ING part 5, 2003 edition, for MKT Wedge Anchor BZ plus HCR of sizes M8 to M20, made of high corrosion-resistant steel (material No. 1.4529), installed in reinforced normal weight concrete (strength class \geq C20/25 and \leq C50/60)

Designation	Maximum loads, when exposed to fire in accordance with the “ <i>Tunnel-Brandraumkurve</i> ” (tunnel fire area curve) subject to the regulations of ZTV-ING part 5, 2007 edition
MKT Wedge Anchor BZ plus HCR	max. F [kN]
M8	$\leq 1,00$
M10	$\leq 1,90$
M12	$\leq 3,00$
M16	$\leq 5,50$
M20	$\leq 6,80$

When designing of fixing must be verified whether the permissible loads (e. g. ETA-99/0010 of 2011-02-08) of the verification of applicability are decisive.

3 Specific indications

The above mentioned analysis report in conjunction with this renewal does not replace the evidence of conformity according to German building authority procedures and standards (e. g. abZ, abP, ETA). The designer shall also consider that the fire resistance of MKT Wedge Anchor BZ plus HCR might be governed within the European Technical Approvals in the future.

The preceding evaluation applies only for MKT Wedge Anchor BZ plus HCR with respect to the technical documents and the installation instructions of MKT GmbH & Co. KG.

The evaluation results for the above mentioned MKT Wedge Anchor BZ plus HCR are only valid for installations in structures made of reinforced normal weight concrete that fulfill the requirements according to “*Tunnel-Brandraumkurve*” (tunnel fire area curve) subject to the regulations of ZTV-ING part 5, 2007 edition.

The analysis report No. 3212/1206-06-Nau- of 1996-11-15 is in conjunction with this document valid thru 2016-11-15.

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